**Computer Manpower in the Country**

3112. SHRI BAIKUNTHNATH SAHU: Will the PRIME MINISTER be pleased to state:

(a) whether there is a need to improve the availability of computer manpower in the country; and

(b) if so, the steps taken by Government in this regard?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND THE MINISTER OF STATE IN THE DEPARTMENTS OF OCEAN DEVELOPMENT, ATOMIC ENERGY, ELECTRONICS AND SPACE (SHRI K. R. NARAYANAN): (a) Yes, Sir.

(b) Government have initiated computer courses at a large number of institutions. Whereas the number of such institutions conducting computer courses in 1983 was only about 30 with annual output of about 1000 persons, the number of such institutions in 1988 is over 300 with output of about 10,000 persons this year and will increase to about 12,000 persons in 1992.

**Strengthening of Defence Production and Research**

3113. SHRI BAIKUNTHNATH SAHU: Will the Minister of DEFENCE be pleased to state:

(a) whether it is a fact that there is a need to strengthen country's defence production and Research and Development capacity;

(b) if so, the steps taken by Government in this regard; and

(c) the number of new defence production units proposed to be set up and the details thereof?

THE MINISTER OF STATE IN THE DEPARTMENT OF DEFENCE PRODUCTION AND SUPPLIES IN THE MINISTRY OF DEFENCE (SHRI CHINTAMANI PANIGRAHI): (a) Sufficient expertise and infrastructure for defence production and research and development exists in the country. However, there is always a need to constantly strengthen and update this infrastructure to meet the challenge of emerging defence technologies, ats an ongoing programme.

(b) and (c) Government has taken appropriate actions in this regard. Perspective Plans are drawn by concerned departments to identify the futuristic requirements and for augmentation of the existing expertise and infrastructure in the areas of research and development and defence production. At present, in addition to the existing ordnance factories, facilities are being established for production of armoured vehicles and ammunition of different calibres. There are plans to create more production facilities in the field of equipment and explosives.

**Identification of Indutsry space collaboration**

3114. SHRI JAGADISH JANI: Will the PRIME MINISTER be pleased to state:

(a) whether the Indian Space Research Organisation has identified some thrust areas for Industry-Space Collaboration by the year 2000 A. D.;

(b) if so, the details thereof; and

(c) the steps taken in this regards?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND THE MINISTER OF STATE IN THE DEPARTMENTS OF OCEAN DEVELOPMENT ATOMIC ENERGY, ELECTRONICS AND SPACE (SHRI K. R. NARAYANAN): (a) and (b). The thrust areas identified for industry-space collaboration by the year 2000 include the following:

—Promotion of Space divisions/ plants/production lines in Indian industries.

—Promotion of industrial consortia for complex ISRO needs.

—Technocrats-entrepreneurship development from ISRO & venture capital funding.

—Professional 'Vendor' Development.

—Export promotion of ISRO technologies/Space-industry products & services.

—Long term commitments/buy back guarantees to industry.

—Securing assistance to Indian Space Industries from Government regulatory agencies.

—Technology forecasting/assessment and Research & Development/Design & Development contracts to industry.

—Technology development & infrastructure information exchange.

—Motivate ISRO R&D teams, project teams & industry-interface professional to grow Space-Industry partnership.

(c) The various actions planned to pursue the above thrust areas are as follows:

—In order to handle the specialised functions related to Space-Industry promotion including High-Tech vendor promotion, assistance for export marketing, increased scale of technology transfer and information services, the Department of Space is planning to set up a Techno-Managerial Corporate body, with flexibility to plough back the earnings through its services for sustained development of Space products and its spin-off products.

—Actions are also contemplated by the Department for making available venture capital through the established mechanisms of the developmental financial institutions in the country for the technology licences of the ISRO/DOS.

—Coordination with various industry Associations like Confederation of Engineering Industries (C.E.I.) will be stepped up to provide necessary information to competent industries to undertake Development/Manufacture of products and services for the Space Programme either individually or in consortia mode.

—Appropriate mechanisms for providing long term commitments to industry, and incentive to them to invest for manufacturing Lines/Setting up plants for meeting the needs of the Space Programme will be implemented.

**Setting up of a Software Park at Bhubaneswar**

3115. SHRI JAGADISH JANI: Will the PRIME MINISTER be pleased to state:

(a) whether there is any proposal under Government's consideration to set up an electronic software park at Bhubaneswar;

(b) if so, the details of the proposal received from the State Government in this regard;

(c) whether Government have considered the said proposal; and

(d) if not, what are the reasons therefor?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND THE MINISTER OF STATE IN THE DEPARTMENTS OF OCEAN DEVELOPMENT, ATOMIC ENERGY, ELECTRONICS, AND SPACE (SHRI K. R. NARAYANAN): (a) Yes, Sir.

(b) and (c) A proposal from the State Government of Orissa for linking Bhubaneswar and Dallas in USA through Satellite link for Software Exports has been received. The proposal is in a preliminary stage.

(d) Does not arise.